

-1- (JAPIO)

ACCESSION NUMBER
TITLE

PATENT APPLICANT
INVENTORS

PATENT NUMBER
APPLICATION DETAILS
SOURCE

INT'L PATENT CLASS
JAPIO CLASS

FIXED KEYWORD CLASS
ABSTRACT

86-058164
ZINC ALLOY POWDER FOR NEGATIVE ELECTRODE OF
NONMERCURY ALKALINE BATTERY AND ITS MANUFACTURE
(2000353) TOSHIBA BATTERY CO LTD
TERAOKA, HIROHITO; FURUSHIMA, KAZUO; CHIBA, NOBUAKI;
MIYASAKA, KOJIRO; YOSHIDA, KAZUMASA
86.03.25 J61058164, JP:61-58164 ;
84.08.29 84JP-178501, 59-178501
86.08.02 SECT. E, SECTION NO. 424; VOL. 10, NO. 221,
PG. 95.
H01M-004/42; C22C-018/00
42.9 (ELECTRONICS--Other); 12.2 (METALS--Metallurgy
Heat Treating); 12.3 (METALS--Alloys)
R057 (FIBERS--Non-woven Fabrics)
PURPOSE: To obtain zinc alloy powder for a negative
electrode having specified shapes, reduced hydrogen
gas evolution, and improved discharge performance by
atomizing molten zinc alloy having no mercury in a
nonoxidizing atmosphere.
CONSTITUTION: Zinc alloy containing at least one of
Al, Mn, Pb, Sn, Cd, Tl, and Bi but containing no
mercury is melted in a nonoxidizing atmosphere having
an oxygen concentration of 0.4vol.% or less, and
atomized to form powder. The zinc alloy powder
obtained contains 50 wt% or more of spherical,
cocoon-shaped, or tear-shaped powder having a minor
axis length of 0.05mm or more and a major axis length
of 0.3mm or less. By using this zinc alloy in the
negative electrode of an alkaline battery, hydrogen
gas evolution is retarded and and short current is
increased.